

Benefits of biogas technology

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Biogas project

- Use microbes to convert waste material into energy and compost
- Existing programmes:
 - Used by individual peasant farmers
 - Use animal dung from farmers own animals
 - Provide gaseous fuel for cooking for family
 - What is left (effluent) is good compost



Biogas project

- Position (approximate figures):
 - 45 million plants in China
 - 5 million in India
 - 300,000 in Nepal
 - 400,000 in rest of Asia, including Bangladesh
 - National Programmes, but
 - Implementation by
 - NGOs
 - SMEs
- e.g. SKG Sangha



Benefits (1)

- Clean gaseous cooking fuel
- No smoke
- Instant availability
- Does not need constant attention
- Reduced danger of burns
- Resource (dung)
available from animal
sheds
- No need to walk to
collect firewood
- No insects from wood
store (cockroaches)



Benefits (2)

- Cooking pots easy to clean (no soot)
- Saving of time (3 hours a day)
- Saving of firewood (2,000 kg a year)
- Reduced deforestation (1,000 biogas plants saves 33.8 ha forest from clear felling- WWF)



- Much reduced smell from the animal sheds (in Vietnam, pig sties are close to the house)

Benefits (3)

- Biogas can be used for lights
- Reduced smell from kerosene lamps
- Savings of 32 litres kerosene a year
- Reduced risk of house fires
- Saving of carbon (4,900 kg a year)
- Since gas available in the morning, children get cooked breakfast before school.



Benefits (4)

- A latrine can be attached
- Improved sanitation
- Reduced transfer of pathogens (especially if slurry is properly processed)



- Reduced risk to women (who go out at dawn or dusk to use the fields)
- Reduce incidence of snake bites

Benefits (5)

- Slurry is a good quality compost (better than raw dung)
- Liquid slurry should be absorbed in dry biomass and composted for 1 month
- Compost even better if use vermi-culture
- Growers prepared to pay cash for vermi-compost

